

Desoto Memorial Hospital Recovers from Hurricane Charley

Full Mitigation Best Practice Story

DeSoto County, Florida

Arcadia, FL – Since its construction in 1968, Desoto Memorial Hospital has provided uninterrupted medical care for the surrounding community – even during the 2004 onslaught of Hurricane Charley.

When Charley hit, Desoto County received extensive damage. The hospital was in no way spared. Part of the roof peeled back, exposing patients and critical equipment to wind-driven rain. More than 35 windows shattered from the force of the high winds and the well-manicured grounds were strewn with debris.



"It was something you would never want to go through, the windows blew in and we closed off the fire doors," said Todd Rachles, safety officer and director of support services.

With ingenuity and perseverance, however, the staff maintained operations during the hurricane, providing crucial life-preserving services when community need was at its greatest. In response to the sudden and severe nature of the storm, hospital staff moved patients down a stairwell to the safety of the building's interior and utilized the boardroom as an emergency room.

Operating in a damaged facility and short on supplies, the hospital staff effectively managed three times the normal emergency room admissions during and after the storm. Despite the improvised working conditions, the civilians and first responders in need of care were still able to count on their community hospital. With a population of just over 30,000, Desoto is a rural county with a strong agricultural base. The United States Department of Agriculture (USDA) Office of Rural Development with its mission "to increase economic opportunity and improve the quality of life for all rural Americans" was a natural choice for a partner in the rebuilding effort.

With the benefit of active congressional support, the USDA provided a \$20-million loan – the largest such award ever made by the agency. Hurricane Charley caused an estimated \$2.3-million in damages to the hospital. The size of the loan permitted not just restoration, but also building expansion and enhancements, with mitigation to strengthen and protect against future storms.

The concept and scope of the project was developed through the efforts of Nancy Frisby, the hospital's chief financial officer and senior vice president, and Warren Santander, vice president for Clinical Services. "The USDA made an initial presentation regarding their programs and we worked with them for approval of the eventual award," said Frisby.

The building project includes expansion of the emergency room and construction of a new patient tower that will increase available services. Improvements to the structure will include strengthened construction and hurricane-resistant laminated glass windows that resist penetration from windborne debris. Hurricane-resistant glass was chosen over shutters for the third floor windows because of limited accessibility. The new windows are graded to resist winds of 150 mph, well above the 120 mph minimum established by current building codes for the area. Supplemental funds for the project were obtained as well. FEMA awarded a \$636,071 grant through the Hazard Mitigation Grant Program (HMGP) to upgrade undamaged windows in the original structure to meet design standards of the new construction. The State of Florida, Department of Community Affairs administers the grant through a contractual arrangement with the hospital.

Mr. Santander took the lead in securing additional funds for mitigation measures. "Obtaining an HMGP grant for hardening the existing hospital building worked right into the overall project and made for a natural fit," said Mr. Santander.

Additionally, some funds of the USDA loan will provide mitigation of critical components outside the hospital walls, such as encasing its bulk oxygen containers (used for patient care) and two freestanding generators with a concrete barrier. These vital resources were susceptible to windborne debris. The encasement prevents windborne debris from striking the equipment, ensuring power and life-preserving oxygen will remain available during possible future hurricanes. The hardening measures included in the project will allow the hospital to be utilized as a limited refuge space for staff, their immediate families and patients, diminishing the need for relocation of patients during a hurricane. The mitigation measures are reflective of the hospital's mission to "acquire and maintain those human and physical resources essential to meet the needs of our

community." Hurricanes are a devastating and traumatic experience for a community. But as the story of rebuilding Desoto Memorial Hospital illustrates, dedication and determination will enable the hospital and its community to "recover and flourish in the future," said James Chromik, president and chief executive officer.

Activity/Project Location

Geographical Area: Single County in a State

FEMA Region: Region IV

State: Florida

County: DeSoto County

Key Activity/Project Information

Sector: Public

Hazard Type: Severe Storm; Flooding; Hurricane/Tropical Storm

Activity/Project Type: Retrofitting, Structural

Activity/Project Start Date: **04/2006**Activity/Project End Date: **Ongoing**

Funding Source: Hazard Mitigation Grant Program (HMGP)

Funding Recipient: Critical Facility - Medical

Application/Project Number: 9999

Activity/Project Economic Analysis

Cost: \$20,636,032.00 (Actual)

Activity/Project Disaster Information

Mitigation Resulted From Federal

Disaster? Yes

Federal Disaster #: 1539, 08/13/2004

Federal Disaster Year: 2004

Value Tested By Disaster? No

Repetitive Loss Property? No

Reference URLs

Reference URL 1: http://www.dmh.org/

Reference URL 2: http://www.fema.gov/government/grant/hmgp/index.shtm

Main Points

- When Hurricane Charley hit, Desoto Memorial Hospital received extensive damage.
- In response to the sudden and severe nature of the storm, hospital staff moved patients down a stairwell to the safety of the building's interior and utilized the boardroom as an emergency room.
- The USDA provided a \$20-million loan with the benefit of active congressional suport for restoration as well as expansion and enhancements
- Supplemental funds for the project were obtained as well. FEMA awarded a \$636,071 grant through the Hazard Mitigation Grant Program (HMGP) to upgrade undamaged windows in the original structure to meet design standards of the new construction.



Artist Rendition of Completed Project